AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows. The paragraph numbers refer to the paragraph numbers of the application as filed.

Please insert the following new paragraph immediately preceding paragraph [0006] on page 4 of the specification:

The present invention provides an isolated costimulating molecule (a) having the biological activity of costimulation of T cells, (b) which occurs on activated CD4+ and CD8+ T lymphocytes but not resting or activated B cells, granulocytes, monocytes, NK cells or dendritic cells, and (c) which has two polypeptide chains, the said molecule having a molecular weight of about 55 to 60 kDa determined in a nonreducing SDS polyacrylamide gel electrophoresis, and the two polypeptide chains of the said molecule having a molecular weight of about 27 kDa and about 29 kDa measured in a reducing SDS polyacrylamide gel electrophoresis. Use of substances which inhibit the biological activity of a costimulating molecule of the invention, such as monoclonal antibodies, natural or synthetic ligands, agonists or antagonists, as pharmaceuticals is provided herein. Substances which inhibit the biological activity of a costimulating molecule of the invention can be used for the production of a pharmaceutical for the treatment of autoimmune diseases, for the prevention of rejection reactions in organ transplants and for the treatment of dysregulation of the immune system.

Please insert the following new paragraph immediately preceding paragraph [0088] on page 20 of the specification:

DEPOSIT OF HYBRIDOMA

The hybridoma 8F4, secreting native monoclonal antibody 8F4, was deposited with the Deutsche Sammlung Von Mikroorganismen und ZellKulturen GmbH ("DSMZ"), at Mascheroder Weg 1b, D-3300 Braunschweig, Germany, on April 9, 2002, in compliance with the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure on behalf of the Applicant and the Robert-Koch-Institut. The deposited hybridoma was assigned DSMZ accession number DSM ACC2539.

Please amend the abstract as follows:

A polypeptide (8F4 molecule) with a T-cell costimulating biological activity is disclosed, as well as monoclonal antibodies against said the 8F4 molecule and hybridoma cells which produce the monoclonal antibodies, the use as medicaments of substances which inhibit the biological activity of the disclosed 8F4 polypeptide, in particular monoclonal antibodies, natural or synthetic ligands, agonists or antagonists, in particular for preventing or treating diseases which involve the immune system, the use of said the 8F4 molecule or cells containing said the 8F4 molecule as medicaments, in particular for preventing or treating diseases which involve the immune system, and the use of substances which specifically recognize the disclosed 8F4 polypeptide, in particular monoclonal antibodies, natural or synthetic ligands, agonists or antagonists, for diagnosing diseases which involve the immune system.